REMARKS

This Amendment is in response to the Office Action mailed April 5, 2005. The responses are in the order in which the issues are raised in the office action.

Claims 1, 5, 8-15 and 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. (U.S. Patent No. 6,691,124) further in view of Spinney (U.S. Patent No. 5,417,704).

The numbering of the claims under this rejection is somewhat confusing in that on Page 2 of the office action, the Examiner identified 1,5, 8-15 and 17-25 as the affected claims whereas on pages 14-17 the Examiner argued claims 26-33 are rejected on the same grounds. In light of this applicants construe the Examiner rejection as related to claims 1,5, 8-15, 17-25 and 26 through 33.

In response to this rejection Claims 5, 24 and 25 are canceled without prejudice.

With respect to the other claims that are amended as shown above. Applicants argue the Examiner has failed to make out a prima facie case of obviousness. Therefore, the claims are not obvious in view of the teachings of the references. To make out a prima facie case of obviousness, the Examiner's combination must teach every element and limitation of applicants' claim. MPEP 2142, pages 2100-128 through 2100-129 (Rev. 2, May 2004). As pointed out in the claims, hereinafter, several elements of applicants' claim are not disclosed in the Examiner's combination. As a consequence, these claims are not obvious in view of the cited reference. In particular, except claims 18-20, the claims call for setting a

Serial Number **10/015165**   - 11 -

threshold based upon fixed predetermined number of nodes to be traversed in the tree structure. No such teaching is suggested in Spinney reference. Instead Spinney, to wit, in part, states, "The tree traversal will continue until a match is found or the tree is exhausted" (See column 16, lines 2-5). These teachings cannot be construed as setting threshold equal to a fixed predetermined number of nodes as set forth in clear manner in the amended claims. It is applicants' contention that since the references specifically fail to teach this feature and seem to suggest the opposite, then the claims are not obvious in view of teachings in the references. Likewise, Gupta does not teach the above feature or element of applicants' claims. Instead, Gupta exhausts the nodes in the tree structure (See Figure 3, Col. 5, line 41 - Col. 6, line 45) without setting a limit on the number of nodes to be traverse as set forth in applicants' claims.

With respect to Claim 32 and newly added Claim 34 these claims call for the tree search or tree walk and CAM read or CAM search be done simultaneously. In contrast, Spinney calls for the tree search and CAM search to be done simultaneously (See Spinney column 16, lines 32-66). Since Spinney does the function in parallel whereas the claims recite sequential performance applicants contend that the reference teaches away from applicants' invention. Because reference teaches away these claims are not obvious in view of the teachings of the references. It is noted that Spinney in column 16 lines 4-6, limited the number of times that the IR process 27 can make request to external memory. The number listed is four. It should be noted that this number does not affect or relates to the number of nodes that the processor traverses in the tree search. Instead, it refers to the number of memory requests that can made to memory. This teaching is completely different from the number of nodes recited in applicants' claims. As a consequence, the claims are not obvious in view of the teachings of the references.

With respect to Claims 12-20, these claims recite, in part,"memory . . . storing a value representative of the maximum number of nodes to be accessed during a tree search routine". The structure which is recited in this group of claims is not taught or disclose in the cited references. Therefore, after the Examiner combination the resulted references will not teach the specific structure set forth in these claims. As a consequence, the Examiner failed to make out a prima facie case of obviousness as it is required under 35 U.S.C. 103 rejection. Therefore, these claims are not obvious in view of the teachings of the references.

It is noted on Page 7 of the office action, the Examiner seems to argued that Spinney teaches the structure of applicants' network processor. Applicants respectfully disagree with the Examiner and argue that there is no such teaching in Spinney. For example, to read Spinney on applicants' claims the Examiner states Spinney teaches: "an embedded processor complex including a plurality of protocol processors (see col. 5, lines 45-49)". A review indicates Column 5, lines 45-49, merely teaches that the controller contains a processor or state machine 20. Certainly this teaching cannot be reasonable construed as an embedded processor complex including a plurality of protocol processors as it is claimed in applicants' invention. In addition, the Examiner seems to rely on the same element of the prior art to cover two separate and independent elements of applicants' claim. It is clear from this that the structure set forth in applicants' claim is not present in Examiner references. Therefore, even after the Examiner combination the missing elements would still be absent. As a consequence, claims 12-20 are not rendered obvious by the Examiner's combined references.

Claims 2-4, 6-7, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. (U.S. Patent No. 6,691,124) in view of Spinney (U.S.
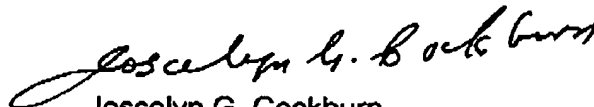
PATENT
IBM Docket No. RAL920000118US1

Patent No. 5,417,704), as applied to claims 1,5, 8-15 and 17-25 above, and further in view of Weaver (U.S. Patent No. 6,173,384).

In response, applicant argues Claims 2-4, 6-7, and 16 are dependent on claims 1 and 12, respectively. The limitations in those claims are incorporated in the dependent claims. Therefore, the dependent claims are patentable for the same reason claims 1 and 12 are patentable over Gupta et. al in view of Spinney. The arguments regarding patentability of those claims set forth above are equally applicable and are incorporated herein by reference. The Weaver reference (U.S. Patent 6,173,384) is merely cumulative since it does not cure the deficiencies in the Spinney and Gupta references argued above and incorporated herein by reference. As a consequence claims 2-4, 6-7 and 16 are patentable over the cited references.

It is believed that the present amendment answers all the issues raised by the Examiner. Reconsideration is hereby requested and an early allowance of all the claims is solicited.

Respectfully Submitted,

Joscelyn G. Cockburn
Reg. No. 27,069
Attorney of Record
Customer Number 25299
IBM Corporation
(919)543-9036

Serial Number 10/015165 - 14 -